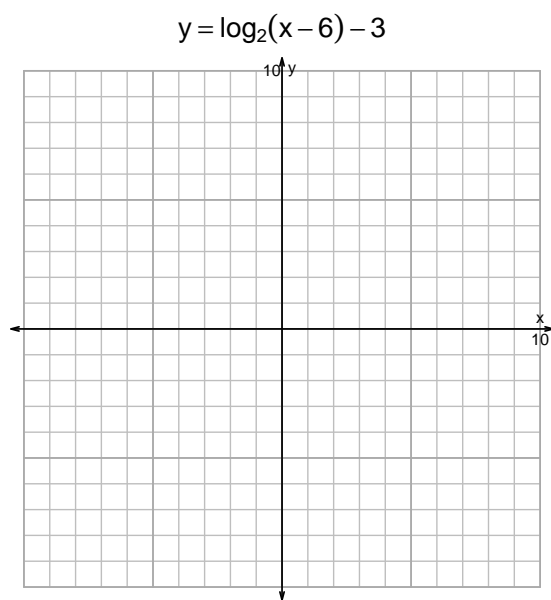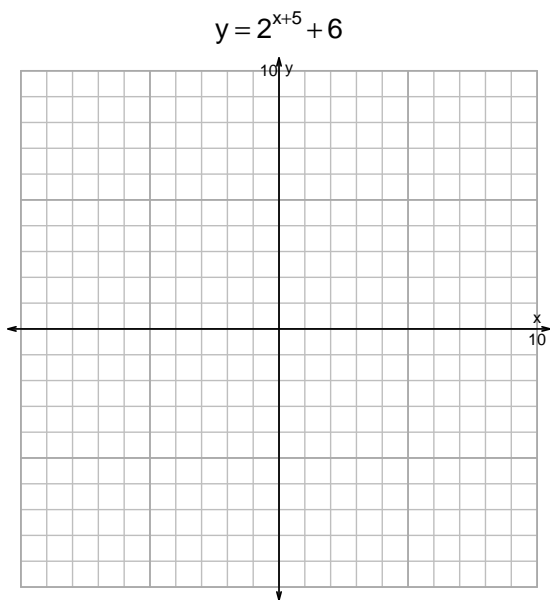Name: _____   Date: _____
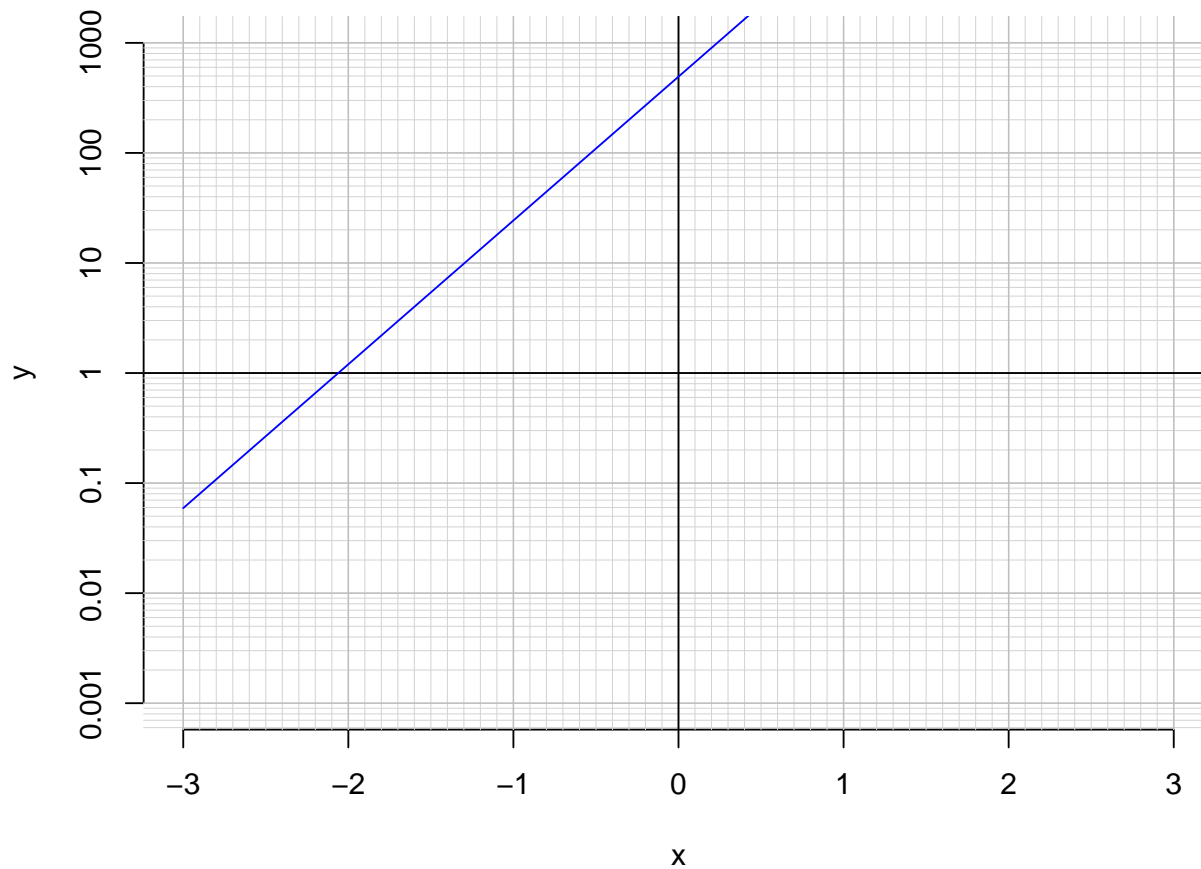
s18quiz: EXP LOG (Practice v132)

1. Graph $y = 2^{x+5} + 6$ and $y = \log_2(x-6) - 3$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = 2^{x+5} + 6$$

$$y = \log_2(x-6) - 3$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$13 = \left(\frac{3}{4}\right) \cdot 10^{5t/7}$$

3. An exponential function $f(x) = 493 \cdot e^{3.01x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-1.6)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(900)$.